ELSEVIER

Physica C 278 (1997) 259–261

PHYSICA C

Author Index to Volume 278

Adachi, S., see Tatsuki, T., **278**, 160
Alario-Franco, M.A., see Rial, C., **278**, 122
Amador, U., see Rial, C., **278**, 122
Andersen, N.H., see Rial, C., **278**, 122
Avramov, P.V., S.G. Ovchinnikov, V.A. Gavrichkov and S.Ph. Ruzankin, Theory of X-ray absorption spectra of strongly correlated copper oxides, **278**, 94

Barber, Z.H., see Feenstra, B.J., **278**, 213
Beckman, R.J., see Willis, J.O., **278**, 1
Bhasale, R., see Jin, J.X., **278**, 85
Bingert, J.F., see Willis, J.O., **278**, 1
Bingham, B.L., see Willis, J.O., **278**, 1
Brabers, V.A.M., see Zhang, X.F., **278**, 31
Bruchlos, G., see Hu, A.M., **278**, 43

Casañ-Pastor, N., see Michel, C.R., **278**, 149
Che, G.C., see Deng, H., **278**, 107
Chen, H., see Deng, H., **278**, 107
Chen, H.-Y., see Zhang, Y.-F., **278**, 39
Chikumoto, N., S. Ozawa, S.I. Yoo, N. Hayashi and M. Murakami, Effects of oxygen content on the superconducting properties of melt-textured LRE123 superconductors, **278**, 187
Chiueh, H.L. and D.S. Chuu, Cooperative behavior of RVB, flux phase, and antiferromagnetic states, **278**, 78
Chu, C.W., see Sasaki, S., **278**, 223
Chu, C.W., see Sasaki, S., **278**, 238
Chuu, D.S., see Chiueh, H.L., **278**, 78
Coulter, J.Y., see Willis, J.O., **278**, 1

Decroux, M., see Feenstra, B.J., **278**, 213
Deltour, R., see Schroeder, J., **278**, 113
De Marneffe, J.F., see Schroeder, J., **278**, 113
Deng, H., C. Dong, J.C. Shen, F. Wu, H. Chen, S.L. Jia, G.C. Che and Z.X. Zhao, The effects of sulphur substitution on $Y(Ba,Sr)_2Cu_{2.5}B_{0.5}O_z$ systems, **278**, 107
Diko, P., V.R. Todt, D.J. Miller and K.C. Goretta, Subgrain formation, 211 particle segregation and high-angle 90° boundaries in melt-grown YBaCuO, **278**, 192
Dilley, N.R. and M.B. Maple, Effect of stoichiometry and alloying on the peak effect in $CeRu_2$, **278**, 207
Dong, C., see Deng, H., **278**, 107
Dou, S.X., see Jin, J.X., **278**, 85
Downes, J.E., see Liu, C.-J., **278**, 143

Enomoto, Y., see Miura, S., **278**, 201

Feenstra, B.J., F.C. Klaassen, D. van der Marel, Z.H. Barber, R. Perez Pinaya and M. Decroux, Penetration depth and conductivity of NbN and $DyBa_2Cu_3O_{7-\delta}$ thin films measured by mm-wave transmission, **278**, 213
Fisher, L.M., A.V. Kalinov, S.E. Savel'ev, I.F. Voloshin, V.A. Yampol'skii, M.A.R. LeBlanc and S. Hirscher, Collapse of the magnetic moment in a hard superconductor under the action of a transverse ac magnetic field, **278**, 169
Fukunaga, O., see Ohashi, N., **278**, 71

Gao, J., see Liu, C.-J., **278**, 143
Gavrichkov, V.A., see Avramov, P.V., **278**, 94
Gawalek, W., see Hu, A.M., **278**, 43
Goernert, P., see Hu, A.M., **278**, 43
Gorbenko, O.Yu., see Samoylenkov, S.V., **278**, 49
Goretta, K.C., see Diko, P., **278**, 192
Goupil, C., A. Ruyter, V. Hardy and Ch. Simon, Flux line pinning and transport measurements in a Bi2212 crystal in the presence of columnar defects, **278**, 23
Grantham, C., see Jin, J.X., **278**, 85
Guo, Y.C., see Jin, J.X., **278**, 85

Hardy, V., see Goupil, C., **278**, 23
Hashimoto, K., see Miura, S., **278**, 201
Hayashi, N., see Chikumoto, N., **278**, 187
Hikata, T., see Kiuchi, M., **278**, 62
Hirabayashi, I., see Yamada, Y., **278**, 180
Hirscher, S., see Fisher, L.M., **278**, 169
Hu, A.M., Z.X. Zhao, M.Z. Wu, C. Wende, T. Strasser, B. Jung, G. Bruchlos, W. Gawalek and P. Goernert, Superconducting properties of melt-textured $Nd_{1+x}Ba_{2-x}Cu_3O_y$ prepared in air, **278**, 43
Hu, D.W., see Zhang, X.F., **278**, 31

Imagawa, H., see Ohashi, N., **278**, 71

Jansen, A.G.M., see Schroeder, J., **278**, 113
Jia, S.L., see Deng, H., **278**, 107
Jin, J.X., C. Grantham, Y.C. Guo, J.N. Li, R. Bhasale, H.K. Liu and S.X. Dou, Magnetic field properties of Bi-2223/Ag HTS coil at 77 K, **278**, 85
Jung, B., see Hu, A.M., **278**, 43

Kaiser, A.B., see Liu, C.-J., **278**, 143
Kalinov, A.V., see Fisher, L.M., **278**, 169
Kato, T., see Kiuchi, M., **278**, 62
Kaul, A.R., see Samoylenkov, S.V., **278**, 49
Kemp, N.T., see Liu, C.-J., **278**, 143
Kiuchi, M., K. Noguchi, T. Matsushita, T. Kato, T. Hikata and K. Sato, Scaling of current–voltage curves in superconducting Bi-2223 silver-sheathed tape wires, **278**, 62
Klaassen, F.C., see Feenstra, B.J., **278**, 213
Knaepen, E., see Schildermans, I., **278**, 55

LeBlanc, M.A.R., see Fisher, L.M., **278**, 169
Li, J.N., see Jin, J.X., **278**, 85
Lin, C., see Zhang, Y.-F., **278**, 39
Liu, C.-J., J. Gao, A.B. Kaiser, N.T. Kemp, J.E. Downes and M.P. Staines, $YBa_2Cu_3O_{7-\delta}$ oriented thin films and magnetically aligned ceramic: measurement of anisotropic thermopower, **278**, 143
Liu, H.K., see Jin, J.X., **278**, 85
Liu, Z.-X., see Zhang, Y.-F., **278**, 39
Lu, G., see Zhang, Y.-F., **278**, 39

Maignan, A., see Villard, G., **278**, 11
Maple, M.B., see Dilley, N.R., **278**, 207
Matsuda, A., see Sasaki, S., **278**, 223
Matsuda, A., see Sasaki, S., **278**, 238
Matsushita, T., see Kiuchi, M., **278**, 62
Mehbod, M., see Schroeder, J., **278**, 113
Michel, C.R. and N. Casañ-Pastor, Electrochemical oxidation of La_2CuO_4 in fused nitrates, **278**, 149
Miller, D.J., see Diko, P., **278**, 192
Miura, S., K. Hashimoto, F. Wang, Y. Enomoto and T. Morishita, Structural and electrical properties of liquid phase epitaxially grown $Y_1Ba_2Cu_3O_x$ films, **278**, 201
Morán, E., see Rial, C., **278**, 122
Morishita, T., see Miura, S., **278**, 201
Mullens, J., see Schildermans, I., **278**, 55
Murakami, M., see Chikumoto, N., **278**, 187

Niiori, Y., see Yamada, Y., **278**, 180
Noguchi, K., see Kiuchi, M., **278**, 62

Ohashi, N., H. Imagawa, T. Tsurumi and O. Fukunaga, Phase stability of tetragonal $SrCuO_2$-type compounds in the $(Sr,Ca)CuO_2$ system, **278**, 71
Ovchinnikov, S.G., see Avramov, P.V., **278**, 94
Ozawa, S., see Chikumoto, N., **278**, 187

Pelloquin, D., see Villard, G., **278**, 11
Perez Pinaya, R., see Feenstra, B.J., **278**, 213
Peterson, D.E., see Willis, J.O., **278**, 1
Phillips, D.S., see Willis, J.O., **278**, 1

Ray II, R.D., see Willis, J.O., **278**, 1
Rial, C., E. Morán, M.A. Alario-Franco, U. Amador and N.H. Andersen, Room temperature chemically oxidized La_2CuO_{4+y}: Phase separation induced by thermal treatment, **278**, 122
Ruyter, A., see Goupil, C., **278**, 23
Ruzankin, S.Ph., see Avramov, P.V., **278**, 94

Samoylenkov, S.V., O.Yu. Gorbenko and A.R. Kaul, An analysis of charge carriers distribution in $RBa_2Cu_3O_7$ using the calculation of bond valence sums, **278**, 49
Sasaki, S., A. Matsuda and C.W. Chu, ^{13}C spin-lattice relaxation study on the electronic properties of K_3C_{60}, **278**, 238
Sasaki, S., A. Matsuda and C.W. Chu, Electronic properties of K_3C_{60} studied by ^{13}C nuclear-magnetic-resonance spectra, **278**, 223
Sato, K., see Kiuchi, M., **278**, 62
Savel'ev, S.E., see Fisher, L.M., **278**, 169
Schildermans, I., M. Van Bael, E. Knaepen, J. Yperman, J. Mullens and L.C. Van Poucke, Synthesis of the high temperature superconductor $YBa_2Cu_3O_{7-\delta}$ by the hydroxide coprecipitation method, **278**, 55
Schroeder, J., M. Ye, J.F. de Marneffe, M. Mehbod, R. Deltour, A.G.M. Jansen and P. Wyder, Thermally activated flux motion in $YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$ epitaxial thin films: influence of magnetic field and Zn doping, **278**, 113
Sebring, R.J., see Willis, J.O., **278**, 1
Shen, J.C., see Deng, H., **278**, 107
Simon, Ch., see Goupil, C., **278**, 23
Smith, M.G., see Willis, J.O., **278**, 1
Smith, P.A., see Willis, J.O., **278**, 1
Staines, M.P., see Liu, C.-J., **278**, 143
Strasser, T., see Hu, A.M., **278**, 43
Sun, Y.-X., see Zhang, Y.-F., **278**, 39

Tamura, T., see Tatsuki, T., **278**, 160
Tanabe, K., see Tatsuki, T., **278**, 160
Tanaka, S., see Yamada, Y., **278**, 180
Tatsuki, T., A. Tokiwa-Yamamoto, T. Tamura, S. Adachi and K. Tanabe, Annealing study on $(Hg,Tl)_2Ba_2Ca_{n-1}Cu_nO_y$ ($n = 1$–5) superconductors, **278**, 160
Todt, V.R., see Diko, P., **278**, 192
Tokiwa-Yamamoto, A., see Tatsuki, T., **278**, 160
Tsurumi, T., see Ohashi, N., **278**, 71

Van Bael, M., see Schildermans, I., **278**, 55
Van der Marel, D., see Feenstra, B.J., **278**, 213
Van Poucke, L.C., see Schildermans, I., **278**, 55
Van Tendeloo, G., see Zhang, X.F., **278**, 31
Villard, G., D. Pelloquin, A. Maignan and A. Wahl, Growth and superconductivity of $Bi_2Sr_2Ca_{1-x}Y_xCu_2O_{8+\delta}$ single crystals in the T_c optimum region, **278**, 11
Voloshin, I.F., see Fisher, L.M., **278**, 169

Wahl, A., see Villard, G., **278**, 11
Wang, F., see Miura, S., **278**, 201
Wende, C., see Hu, A.M., **278**, 43
Willis, J.O., R.D. Ray II, J.F. Bingert, D.S. Phillips, R.J. Beckman, M.G. Smith, R.J. Sebring, P.A. Smith, B.L. Bingham, J.Y. Coulter and D.E. Peterson, Processing factors for high critical current density in Bi-2223/Ag tapes, **278**, 1
Wu, F., see Deng, H., **278**, 107

Wu, M.Z., see Hu, A.M., **278**, 43
Wyder, P., see Schroeder, J., **278**, 113

Yamada, Y., Y. Niiori, I. Hirabayashi and S. Tanaka, Liquid phase epitaxy of crystalline $REBa_2Cu_3O_{6+\delta}$ films on reactive substrates using the BaF_2–BaO–CuO flux, **278**, 180
Yampol'skii, V.A., see Fisher, L.M., **278**, 169
Ye, M., see Schroeder, J., **278**, 113
Yoo, S.I., see Chikumoto, N., **278**, 187
Yperman, J., see Schildermans, I., **278**, 55

Zhang, X.F., G. Van Tendeloo, D.W. Hu and V.A.M. Brabers, Room temperature $(2a \times 2b)$ superstructure formed in Sr-substituted $Bi_2(Sr_{1.6}Y_{0.4})CaCu_2O_y$ single crystals, **278**, 31
Zhang, Y.-F., C. Lin, G. Lu, Z.-X. Liu, H.-Y. Chen and Y.-X. Sun, Weak ferromagnetism and superconductivity in $(Gd,R)_{1.85}Ce_{0.15}CuO_4$ with R = Pr, Nd, and Sm, **278**, 39
Zhao, Z.X., see Deng, H., **278**, 107
Zhao, Z.X., see Hu, A.M., **278**, 43

ELSEVIER

Physica C 278 (1997) 262–263

PHYSICA C

Analytic Subject Index to Volume 278

Activation energy
–in Bi2212 crystal 23
Anisotropy
–of K_3C_{60} 238
Antiferromagnetic order 78

Band structure
–of K_3C_{60} 223
Bond valence sum 49

Charge carriers
–in $RBa_2Cu_3O_7$ 49
^{13}C-NMR spectra
–of K_3C_{60} 223
Co-precipitation 55
Collapse of magnetic moment 169
Critical ampere-turns 85
Critical current density
–of Bi-2223 silver-sheathed tape wires 62
–of Bi-2223/Ag tapes 1
–of Nd123 187
–of $Nd_{1+x}Ba_{2-x}Cu_3O_y$ 43
–of Sn123 187
–of $Y_1Ba_2Cu_3O_x$ films 201
Cu-O chains
–in $RBa_2Cu_3O_7$ 49
Cu-O planes
–in $RBa_2Cu_3O_7$ 49

Doping effects
–in $Bi_2(Sr_{1.6}Y_{0.4})CaCu_2O_y$ single crystals 31

Electric resistivity
–of $YBa_2Cu_3O_{7-\delta}$ thin films 143
Electrical resistivity
–of $Y_1Ba_2Cu_3O_x$ films 201
Electrochemical oxidation
–of La_2CuO_4 149
Electron correlations 94
Electronic structure
–of K_3C_{60} 238
Extended Korringa relation 238

Flux pinning
–in Bi-2223 silver-sheathed tape wires 62
–in Bi2212 crystal 23
–in $YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$ 113

Grains and subgrains
–in melt-processed YBaCuO 192

Hebel–Slichter coherence peak 238
High pressure synthesis
–of $(Hg,Tl)_2Ba_2Ca_{n-1}Cu_nO_y$ 160
–of $Sr_{1-x}Ca_xCuO_2$ 71
Hole concentration
–in La_2CuO_{4+y} 122
–in $RBa_2Cu_3O_7$ 49
–in $Y(Ba,Sr)_2Cu_{2.5}B_{0.5}O_z$ 107
Holons 78
Homologous series 160
Hyperfine coupling
–in K_3C_{60} 223

I-V characteristics
–of Bi-2223 silver-sheathed tape wires 62
Irradiation effect
–on Bi2212 crystal 23
Irreversibility field 187
Irreversibility line
–of $Bi_2Sr_2Ca_{1-x}Y_xCu_2O_{8+\delta}$ single crystals 11

Knight shift 223

Lattice constants
–of $Sr_{1-x}Ca_xCuO_2$ 71
Liquid phase epitaxy 180

Magnetic field distribution 85
Magnetic induction 169
Magnetic susceptibility
–of $(Hg,Tl)_2Ba_2Ca_{n-1}Cu_nO_y$ 160
Magnetization
–of $Bi_2Sr_2Ca_{1-x}Y_xCu_2O_{8+\delta}$ single crystals 11
–of $CeRu_2$ 207
–of $Nd_{1+x}Ba_{2-x}Cu_3O_y$ 43
–of YBCO 169
Melt texturing
–of $Nd_{1+x}Ba_{2-x}Cu_3O_y$ 43
Melt-processing
–of Nd123 187
–of Sn123 187
Microstructure
–of Bi-2223/Ag tapes 1
–of $Bi_2(Sr_{1.6}Y_{0.4})CaCu_2O_y$ single crystals 31
–of $REBa_2Cu_3O_{6+\delta}$ films 180
–of $YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$ 113
–of melt-processed YBaCuO 192
p-d model 94
mm-wave spectroscopy
–of $DyBa_2Cu_3O_{7-\delta}$ 213
–of NbN 213
Molten salts 149

Neutron diffraction
–on La_2CuO_{4+y} 122

Oxygen deficiency
–in Nd123 187
–in Sn123 187
Oxygen diffusion
–in La_2CuO_{4+y} 122
Oxygen stoichiometry
–in La_2CuO_{4+y} 122

Peak effect 187
–in $CeRu_2$ 207
Penetration depth
–in $DyBa_2Cu_3O_{7-\delta}$ 213
–in NbN 213
Peroxide–superoxide 149
Phase diagram 78
–of $CeRu_2$ 207
Phase relations 180
Phase separation
–in La_2CuO_{4+y} 122
Pinning force
–in Bi-2223 silver-sheathed tape wires 62

Post annealing
–of $(Hg,Tl)_2Ba_2Ca_{n-1}Cu_nO_y$ 160

RVB model 78

Spin–lattice relaxation
–in K_3C_{60} 238
Spinons 78
Strongly correlated copper oxides 94
Structure deformation
–in $Gd_{1.85-x}R_xCe_{0.15}CuO_4$ 39
Structure
–of $(Hg,Tl)_2Ba_2Ca_{n-1}Cu_nO_y$ 160
–of $Sr_{1-x}Ca_xCuO_2$ 71
–of $Y(Ba,Sr)_2Cu_{2.5}B_{0.5}O_z$ 107
–of $Y_1Ba_2Cu_3O_x$ films 201
Substitution effects
–in $Bi_2Sr_2Ca_{1-x}Y_xCu_2O_{8+\delta}$ single crystals 11
–in $CeRu_2$ 207
–in $YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$ 113
–on $Y(Ba,Sr)_2Cu_{2.5}B_{0.5}O_z$ 107
Sulphur 107
Superconducting coil
–of $(Bi,Pb)_2Sr_2Ca_2Cu_3O_{10+x}$ Ag wire 85
Susceptibility
–of $Gd_{1.85-x}R_xCe_{0.15}CuO_4$ 39
Synthesis
–of Bi-2223/Ag tapes 1
–of $Bi_2(Sr_{1.6}Y_{0.4})CaCu_2O_y$ single crystals 31
–of $Bi_2Sr_2Ca_{1-x}Y_xCu_2O_{8+\delta}$ single crystals 11
–of $Gd_{1.85-x}R_xCe_{0.15}CuO_4$ 39
–of $Nd_{1+x}Ba_{2-x}Cu_3O_y$ 43
–of $REBa_2Cu_3O_{6+\delta}$ films 180
–of $Y(Ba,Sr)_2Cu_{2.5}B_{0.5}O_z$ 107
–of $Y_1Ba_2Cu_3O_x$ films 201
–of $YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$ 113
–of $YBa_2Cu_3O_{7-\delta}$ 55
–of melt-processed YBaCuO 192
Thermal treatment
–for $YBa_2Cu_3O_{7-\delta}$ 55
Thermoelectric power
–of $YBa_2Cu_3O_{7-\delta}$ ceramic 143
–of $YBa_2Cu_3O_{7-\delta}$ thin films 143
Thermomechanical processing
–of Bi-2223/Ag tapes 1
Thin films 213
Transmission electron microscopy
–on $Bi_2(Sr_{1.6}Y_{0.4})CaCu_2O_y$ single crystals 31

Weak ferromagnetism
–in $Gd_{1.85-x}R_xCe_{0.15}CuO_4$ 39

X-ray absorption spectra 94

Y_2BaCuO_5 particle segregation 192

ELSEVIER

Physica C 278 (1997) 264

PHYSICA C

Materials Index to Volume 278

$(Bi,Pb)_2Sr_2Ca_2Cu_3O_{10+x}$ Ag wire
–superconducting coil 85
Bi-2223 silver-sheathed tape wires
–critical current density 62
–flux pinning 62
–i-V characteristics 62
–pinning force 62
Bi-2223/Ag tapes
–critical current density 1
–microstructure 1
–synthesis 1
–thermomechanical processing 1
Bi2212 crystal
–activation energy 23
–flux pinning 23
–irradiation effect 23
$Bi_2(Sr_{1.6}Y_{0.4})CaCu_2O_y$ single crystals
–doping effects 31
–microstructure 31
–synthesis 31
–transmission electron microscopy 31
$Bi_2Sr_2Ca_{1-x}Y_xCu_2O_{8+\delta}$ single crystals
–irreversibility line 11
–magnetization 11
–substitution effects 11
–synthesis 11

$CeRu_2$
–magnetization 207
–peak effect 207
–phase diagram 207
–substitution effects 207

$DyBa_2Cu_3O_{7-\delta}$
–penetration depth 213
–mm-wave spectroscopy 213

$Gd_{1.85-x}R_xCe_{0.15}CuO_4$
–structure deformation 39
–susceptibility 39
–synthesis 39
–weak ferromagnetism 39

$(Hg,Tl)_2Ba_2Ca_{n-1}Cu_nO_y$
–high pressure synthesis 160
–magnetic susceptibility 160
–post annealing 160
–structure 160

K_3C_{60}
–^{13}C-NMR spectra 223
–anisotropy 238
–band structure 223
–electronic structure 238
–hyperfine coupling 223
–spin–lattice relaxation 238

La_2CuO_{4+y}
–hole concentration 122
–neutron diffraction 122
–oxygen diffusion 122
–oxygen stoichiometry 122
–phase separation 122
La_2CuO_4
–electrochemical oxidation 149

melt-processed YBaCuO
–grains and subgrains 192
–microstructure 192
–synthesis 192

NbN
–penetration depth 213
–mm-wave spectroscopy 213
Nd123
–critical current density 187
–melt-processing 187
–oxygen deficiency 187
$Nd_{1+x}Ba_{2-x}Cu_3O_y$
–critical current density 43
–magnetization 43
–melt texturing 43
–synthesis 43

$RBa_2Cu_3O_7$
–charge carriers 49
–cu-O chains 49
–cu-O planes 49
–hole concentration 49
$REBa_2Cu_3O_{6+\delta}$ films
–microstructure 180
–synthesis 180

Sn123
–critical current density 187
–melt-processing 187
–oxygen deficiency 187
$Sr_{1-x}Ca_xCuO_2$
–high pressure synthesis 71
–lattice constants 71
–structure 71

$Y(Ba,Sr)_2Cu_{2.5}B_{0.5}O_z$
–hole concentration 107
–structure 107
–substitution effects 107
–synthesis 107
$Y_1Ba_2Cu_3O_x$ films
–critical current density 201
–electrical resistivity 201
–structure 201
–synthesis 201
YBCO
–magnetization 169
$YBa_2(Cu_{1-x}Zn_x)_3O_{7-\delta}$
–flux pinning 113
–microstructure 113
–substitution effects 113
–synthesis 113
$YBa_2Cu_3O_{7-\delta}$
–synthesis 55
–thermal treatment 55
$YBa_2Cu_3O_{7-\delta}$ ceramic
–thermoelectric power 143
$YBa_2Cu_3O_{7-\delta}$ thin films
–electric resistivity 143
–thermoelectric power 143